



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN - 9 2013

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

REPLY TO THE ATTENTION OF:

Sean Craven, Regulatory Analyst
Merit Energy Company, LLC, Kalkaska Gas Plant
1510 Thomas Road SW
Kalkaska, Michigan 49646

Re: Finding of Violation
Kalkaska Gas Plant
Kalkaska, Michigan

Dear Mr. Craven:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Merit Energy Company LLC (you). We find that you are violating Section 111 of the Clean Air Act (CAA), 42 U.S.C. § 7411, at the Kalkaska Gas Plant in Kalkaska, Michigan.

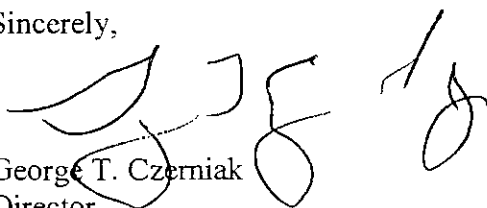
We have several enforcement options under Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3). These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you the opportunity to present information on the specific findings of violation, the efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Bonnie Bush. You may call her at 312.353.6684 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Czerniak', is written over the printed name.

George T. Czerniak
Director
Air and Radiation Division

Enclosure

cc: Tom Hess, Enforcement Unit Chief
Air Quality Division
Michigan Department of Environmental Quality

Janis Denman, Supervisor
Cadillac District Office
Michigan Department of Environmental Quality

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

**Merit Energy Company, Kalkaska Gas Plant
Kalkaska, Michigan**

Proceedings Pursuant to
the Clean Air Act,
42 U.S.C. §§ 7401 et seq.

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) **FINDING OF VIOLATION**
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) **EPA-5-13-MI-01**
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FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that Merit Energy Company is violating Section 111(e) of the Clean Air Act (CAA) at 42 U.S.C. § 7411(e), the Title V permitting provisions of the CAA at 42 U.S.C. §§ 7661-7661f, and the regulations implementing Title V at 40 C.F.R. Part 70 at its Kalkaska Gas Plant (KGP). Specifically, Merit is violating the Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants at 40 C.F.R. §§ 60.630 – 60.636 (Subpart KKK), Method 21 – Determination of Volatile Organic Compound (VOC) Leaks at 40 C.F.R. Part 60 Appendix A (Method 21), and provisions of its Renewable Operating Permit MI-ROP-B4292-2008 (ROP) as follows:

Regulatory Authority

1. Section 111 of the CAA, 42 U.S.C. § 7411, authorizes EPA to promulgate regulations establishing New Source Performance Standards (NSPS).
2. Section 111(e) of the CAA, 42 U.S.C. § 7411(e), states that after the effective date of standards of performance promulgated under this section, it shall be unlawful for any owner or operator of any new source to operate such source in violation of any standard of performance applicable to such source.
3. Subpart KKK, at 40 C.F.R. §§ 60.630(a)(1) and (3), applies to all equipment except compressors within a process unit in onshore natural gas processing plants.
4. Subpart KKK, at 40 C.F.R. § 60.630(b), specifies that any affected facility that commences construction, reconstruction, or modification after January 20, 1984 and on or before August 23, 2011, is subject to the requirements of this subpart.
5. Subpart KKK, at 40 C.F.R. § 60.631, defines process unit as equipment assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products or other operations associated with the processing of natural gas products.

6. Subpart KKK, at 40 C.F.R. § 60.631, defines equipment as each pump, pressure relief device, open-ended valve or line, valve, compressor, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by Subpart KKK.

7. Subpart KKK, at 40 C.F.R. § 60.631, defines onshore as all facilities except those that are located in the territorial seas or on the outer continental shelf.

8. Subpart KKK, at 40 C.F.R. § 60.632(a), (d), and (e), specifies the provisions of Subpart VV that apply to owners and operators of affected facilities under Subpart KKK and requires compliance with those Subpart VV provisions no later than 180 days after initial startup.

9. Subpart VV, at 40 C.F.R. § 60.482-1, sets forth general standards for owners and operators subject to this subpart and, among other things, specifies at § 60.482-1(b) that methods of compliance determination include review of records and reports, review of performance test results, and inspection using the methods and procedures specified in § 60.485.

10. Subpart VV, at 40 C.F.R. § 60.482-6, sets forth standards for open-ended valves or lines, including the requirement at § 60.482-6(a)(2) that a cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

11. Subpart VV, at 40 C.F.R. § 60.482-7, sets forth standards for valves in gas/vapor and in light liquid service, including the requirement at 40 C.F.R. § 60.482-7(a)(1) that each valve be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485(b) and that each valve shall comply with paragraphs (b) through (e) of this section.

12. Subpart VV, at 40 C.F.R. § 60.482-7(c)(2), specifies that any valve being monitored quarterly that is found to be leaking, must be monitored monthly until a leak is not detected for 2 successive months.

13. Subpart VV, at 40 C.F.R. § 60.485(b), requires owners and operators to determine compliance with applicable standards using Method 21.

14. Subpart VV, at 40 C.F.R. § 60.485(b)(1), requires that the instrument used to perform Method 21 shall be calibrated before use each day of its use by procedures specified in Method 21.

15. The NSPS Appendix A, at 40 C.F.R. Part 60, Method 21 § 8.1.1.1, 8.2, and 10.1, specify the calibration procedures for the instrument used to detect leaks.

16. The NSPS Appendix A, at 40 C.F.R. Part 60, Method 21 §§ 8.3.1 and 8.3.1.1, sets forth the technique which must be used to determine if there is a leak from a valve.

17. Subpart VV, at 40 C.F.R. § 60.486(b), sets forth requirements for identification of leaking components.

18. Subpart VV, at 40 C.F.R. § 60.486(e)(1), sets forth the recordkeeping requirements for identifying all equipment subject to the standards in 40 C.F.R. §§ 60.482-1 to 60.482-10.

19. Title V of the CAA, 42 U.S.C. §§ 7661 through 7661f, and its implementing regulations at 40 C.F.R. Part 70 establish an operating permit program for certain sources.

20. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate except in compliance with a Title V permit.

21. EPA granted final interim approval to the Michigan Title V operating permit program on January 10, 1997. 62 Fed. Reg. 1387. The program became effective on February 10, 1997. The Michigan Title V program was granted final full approval by EPA, effective November 30, 2001. 66 Fed. Reg. 62949. See 40 C.F.R. Part 70, Appendix A.

Findings of Fact

22. Merit owns and operates the Kalkaska Gas Plant (KGP), an onshore natural gas processing plant, at 1510 Thomas Road SW, Kalkaska, Michigan, which removes natural gas liquids from field gas and fractionates the natural gas liquids.

23. The Michigan Department of Environmental Quality issued a final Title V permit, (the ROP), to Merit for KGP, effective May 28, 2008.

24. Merit's ROP specifies that the KGP fractionation plant was installed on January 1, 1972, and was modified on March 28, 2007.

25. Merit KGP is subject to the requirements at 40 C.F.R. Part 60, Subpart KKK and, those provisions of Subpart VV that are referenced in Subpart KKK.

26. On November 6 and 7, 2012, EPA conducted a CAA inspection (November 2012 Inspection) of the Merit KGP and performed monitoring for leaks on valves using Method 21. On November 6, 2012, NTH, Merit's consulting company, also performed leak monitoring of certain valves at Merit's KGP. Appendix A summarizes results from the November 2012 inspection and monitoring.

27. For the eight periodic monitoring events since April 2008, Merit reported an average of 0.3% as the percentage of valves leaking in its semiannual reports whereas EPA found a 3.8% leaking rate during the November 2012 inspection.

Violations

28. During the November 2012 inspection, EPA discovered that Merit KGP failed to seal each open-ended valve, specifically tag number K185, in violation of 40 C.F.R. § 60.632(a) (and by reference § 60.482-6(a)(2)) and ROP EU-KGPN III.4. See Attachment A.

29. During the November 2012 inspection, EPA discovered that Merit KGP failed to perform Method 21 on each valve in gas/vapor and/or light liquid service, in violation of 40 C.F.R. § 60.632(a) (and by reference § 60.482-7(a)(1)) and ROP EU-KGPN V.3. See Attachment A (List of Untagged Components).

30. According to Merit's semiannual reports, Merit KGP failed to conduct monthly monitoring on valves K419, K479, K525, and K681, originally monitored as leaking in the period from October 30, 2007, through January 24, 2008, in violation of 40 C.F.R. § 60.632(a) (and by reference § 60.482-7(c)(2)).

31. During the November 2012 inspection, EPA discovered that Merit KGP failed to calibrate the instrument used for Method 21 each day of use, in violation of 40 C.F.R. § 60.632(d) (and by reference § 60.485(b)(1) and 40 C.F.R. Part 60 Method 21 §§ 8.1.1.1, 8.2, and 10.1).

32. Based on November 2012 inspection and paragraph 27, Merit KGP failed to perform Method 21 properly on valves, in violation of 40 C.F.R. § 60.632(d) (and by reference § 60.485(b), 40 C.F.R. Part 60 Method 21 §§ 8.3.1 and 8.3.1.1), and ROP EU-KGPN V.3 from at least April 2008 until November 2012.

33. During the November 2012 inspection, EPA discovered that Merit KGP is unable to monitor valves that are insulated such that the probe inlet does not reach the surface of the component interface where leakage could occur. Merit KGP failed to perform Method 21 properly on insulated valves, in violation of 40 C.F.R. § 60.632(d) (and by reference 60.485(b), 40 C.F.R. Part 60 Method 21 §§ 8.3.1 and 8.3.1.1), and ROP EU-KGPN V.3. See Attachment A (List of Insulated Valves).

34. During the November 2012 inspection, EPA discovered that Merit KGP failed to tag leaking valves, in violation of 40 C.F.R. §§ 60.632(e), 60.635(a) (and by reference 60.486(b)). Leaks not tagged include, but are not limited to, valves K011, K025, K431, K480, K543, K552, K563, K637, K184, K201, K219, K223, K232, and K238. See Attachment A.

35. During the November 2012 inspection, EPA discovered that Merit KGP failed to identify all valves subject to the standards set forth at 40 C.F.R. §§ 60.482-1 to 60.482-10, in violation of 40 C.F.R. §§ 60.632(e), 60.635(a) (and by reference § 60.486(e)(1)) and ROP EU-KGPN VI.1.a. See Attachment A (List of Untagged Components).

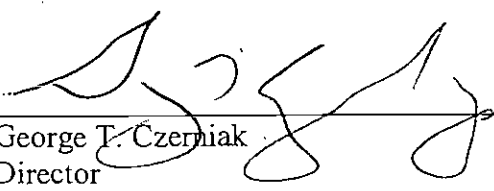
36. Merit KGP failed to submit semi-annual reports (dated March 25, 2009, April 10, 2009 and September 1, 2009) by the deadlines specified in its ROP, in violation of ROP EU-KGPN VII.2.

Enforcement Authority

37. . . Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), provides that whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any requirement or prohibition of, *inter alia*, any rule promulgated under the NSPS requirements of Section 111(e) of the CAA, 42 U.S.C. § 7411(e), the NESHAP requirements of Section 112(d), 42 U.S.C. § 7412(d), Title V of the CAA, 42 U.S.C. §§ 7661-7661f, or any rule or permit issued thereunder, the Administrator may issue an administrative penalty order under Section 113(d), issue an order requiring compliance with such requirement or prohibition, or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

Date

1/9/13


George T. Czerniak
Director
Air and Radiation Division

Attachment A
Merit Kalkaska Gas Plant
EPA LDAR Monitoring Results Summary

Component Type	Number Monitored	Number Leaking	Percent Leaking
Valves/1 OEL	366	14	3.8%

Date/Time	Component ID	Component Type	EPA Reading (ppm)	NTH reading (ppm)
11/6/12				
~10:00 AM	K011	Valve	14,000	7,000
~10:15 AM	K025	Valve	26,000	14,000
~03:00 PM	K431	Valve	32,000	15,000
~02:45 PM	K480	Valve	48,000-50,000	60,000
~01:30 PM	K543	Valve	50,000	-
~01:15 PM	K552	Valve	33,000	40,000
~01:10 PM	K563	Valve	12,300-21,000	3,000
~11:05 AM	K637	Valve	50,000 to flameout	flameout
11/7/12				
~10:15 AM	K184	Valve	33,000 to flameout	not on site
~10:30 AM	K185	OEL	25,000	not on site
~10:30 AM	K201	Valve	15,500	not on site
~10:40 AM	K219	Valve	12,200	not on site
~10:44 AM	K223	Valve	43,000 to flameout	not on site
~10:47 AM	K232	Valve	14,000-32,000	not on site
~10:55 AM	K238	Valve	50,000 to flameout	not on site

List of Insulated Valves, Unable to Access to Monitor

Valve ID	
K434	K457
K441	K465
K443	K466
K445	K539
K452	K958
K454	
Untagged valve to right of K189	

List of Untagged Components

K005-009 – 3 untagged valves near these valves, identified by KGP as the inlet gas compressor
K037-038 – 2 valves near these valves
K071 – untagged valve to left of K071
K073 – 2 untagged valves to left and right of K073
K182 – nearby, identified by Mr. Loney as dehydrator bed outlet valve, labeled ZSO 2801
K184 – nearby, 1st valve off the bottom of the dehydrator outlet to bypass

K189 – to the right of K189, insulated

K221 – untagged valve above K221

K223 – untagged valve to right of K223

K237 – untagged assembly nearby

K356 – untagged valve nearby

SDV-7506 Compressor discharge line to #1 compressor – untagged valve

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-13-MI-01, by Certified Mail, Return Receipt Requested, to:

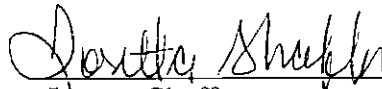
Sean Craven, Regulatory Analyst
Merit Energy, Kalkaska Gas Plant
1510 Thomas Road SW
Kalkaska, Michigan 49646

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Thomas Hess, Enforcement Unit Chief
Michigan Department of Environmental Quality
Air Quality Division, Enforcement Unit
Constitution Hall, 3rd Floor North Tower
525 West Allegan
Lansing, Michigan 48933-1502

Janis Denman, Supervisor
Michigan Department of Environmental Quality
Cadillac District Office
120 West Chapin Street
Cadillac, Michigan 49601-2158

On the 10 day of January 2012



Loretta Shaffer
Administrative Assistant
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 70091680000076740524